

1. A system for remote monitoring and controlling of energy consumption of a facility, comprising:

5           a database coupled to the processor, the database  
operable to receive and store energy consumption data  
associated with the facility;

an analysis engine residing in the memory and  
10 executable by the processor, the analysis engine operable  
to evaluate the energy consumption data and determine  
whether energy consumption operating parameters require  
modification to increase efficiency; and

a control engine residing in the memory and  
15 executable by the processor, the control engine operable  
to initiate operating parameter modification of an energy  
consumption system of the facility in response to a  
desired operating parameter modification.

20           2.    The system of Claim 1, wherein the database  
receives the energy consumption data via an Internet  
communications network.

3. The system of Claim 1, wherein the database  
25 receives the energy consumption data from a data  
collector disposed at the facility.

4. The system of Claim 1, wherein database further receives and stores environmental data, and wherein the analysis engine is further operable to determine whether operating parameter modification is required using the environmental data.

10. The system of Claim 1, wherein the control engine is further operable to control a rate of energy  
30 consumption data collection at the facility.

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15. A method for remote monitoring and controlling of energy consumption of a facility, comprising:

receiving energy consumption data associated with the facility at a processor disposed remotely from the  
5 facility;

receiving environmental data associated with the facility;

determining whether an operating parameter of an energy consumption system of the facility requires  
10 modification to increase efficiency using the energy consumption data and the environmental data; and

automatically modifying the operating parameter of the energy consumption system corresponding to the required modification.

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16. The method of Claim 15, wherein receiving the energy consumption data comprises receiving the energy consumption data via an Internet communications network.

20 17. The method of Claim 15, wherein receiving the energy consumption data comprises receiving the energy consumption data from a data collector disposed at the facility.

25 18. The method of Claim 15, wherein receiving the environmental data comprises receiving environmental forecast information, and wherein determining comprises determining whether the operating parameter of the energy consumption system of the facility requires modification  
30 using the environmental forecast information.

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19. The method of Claim 15, further comprising generating an energy consumption report based on the energy consumption data.

5           20. The method of Claim 15, further comprising  
validating the energy consumption data.

21. The method of Claim 20, wherein validating  
comprises comparing the energy consumption data to  
10 historical energy consumption information.

22. The method of Claim 15, further comprising:  
determining whether a value of the energy  
consumption data remains substantially constant for a  
predetermined time period; and  
validating the energy consumption data if the value  
remains substantially constant for the predetermined time  
period.

20           23. The method of Claim 15, further comprising:  
              determining whether a value of the energy  
consumption data exceeds a predetermined range for the  
energy consumption data; and  
              validating the energy consumption data if the value  
25 exceeds the predetermined range.

24. The method of Claim 15, further comprising automatically controlling a rate of energy consumption data collection at the facility.

25. The method of Claim 15, further comprising automatically modifying a rate of energy data collection at the facility in response to a predetermined sequence of events.

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26. The method of Claim 15, further comprising providing a plurality of data collectors coupled together at the facility, and wherein receiving the energy consumption data comprises receiving the energy consumption data from the data collectors.

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27. The method of Claim 26, further comprising:  
determining whether a predetermined event occurs associated with energy consumption data loss; and

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automatically transmitting energy consumption information acquired by one of the data collectors to another data collector in response to the occurrence of the predetermined event.

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28. A system for remote monitoring and controlling energy consumption of a facility, comprising:

a processor;

5 a plurality of data collectors disposed at the facility, the plurality of data collectors operable to automatically transmit energy consumption data to the processor, the energy consumption data associated with an energy consumption system of the facility;

a memory coupled to the processor; and

10 an analysis engine residing in the memory and executable by the processor, the analysis engine operable to evaluate the energy consumption data and determine energy consumption efficiency of the system, the analysis engine further operable to determine whether an operating  
15 parameter modification to the system would result in an energy consumption efficiency increase.

29. The system of Claim 28, wherein the plurality of data collectors is operable to automatically transmit  
20 the energy consumption data via an Internet communications network to the processor.

30. The system of Claim 28, wherein the data collectors are coupled together, and wherein each of the  
25 data collectors is operable to share energy consumption data with another data collector.

31. The system of Claim 28, further comprising a control engine residing in the memory and executable by  
30 the processor, the control engine operable to initiate a modification to a rate of data collection by the data collectors.

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32. The system of Claim 28, wherein each of the data collectors is further operable to store a history of energy consumption data values for a predetermined time period.

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33. The system of Claim 32, wherein each of the data collectors is operable to transmit a predetermined quantity of the energy consumption data values occurring prior to and after a predetermined event to the processor after the occurrence of the predetermined event.

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34. The system of Claim 33, wherein each of the data collectors is operable to determine an average energy consumption data value for a predetermined time interval and transmit the average energy consumption data value to the processor if the predetermined event does not occur.

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35. The system of Claim 32, wherein each of the data collectors is operable to transmit the respective energy consumption data to another data collector upon the occurrence of a predetermined event.

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36. The system of Claim 28, wherein the processor is further operable to access an environmental service to retrieve environmental data associated with the facility, and wherein the analysis engine is further operable to evaluate the system using the environmental data and the energy consumption data.

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37. The system of Claim 28, further comprising a control engine residing in the memory and executable by the processor, the control engine operable to initiate the operating parameter modification of the energy consumption system.

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